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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,522	06/01/2001	Norihiro Imamura	KIX0149-US	1361
36183 7590 12/17/2007 PAUL, HASTINGS, JANOFSKY & WALKER LLP 875 15th Street, NW Washington, DC 20005			EXAMINER THOMAS, BRANDI N	
			ART UNIT 2873	PAPER NUMBER
			MAIL DATE 12/17/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 09/870,522	Applicant(s) <span style="float: right;">T/H</span> IMAMURA ET AL.	
	Examiner Brandi N. Thomas	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Detailed Action</u>                    |

## DETAILED ACTION

### *Response to Amendment*

1. Upon further consideration of the arguments provided by the applicant in the appeal brief file on, 9/17/07, the previous rejection has been withdrawn and a newly found reference has been applied.

  
RICKY MACK  
SUPERVISORY PATENT EXAMINER

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniguchi et al. (5023422) in view of Brown (4247493) further in view of Fujimoto (6545811).

Regarding claim 1, Taniguchi et al. discloses, in figures 1 and 11, a method of making a lens array (4) comprising the steps of: forming a resin-molded piece which includes a plurality of lenses (8) each having a convex lens surface (col. 4, lines 47-49), and a holder portion (9) for holding the plurality of lenses (8) but does not specifically disclose applying a coating to the holder portion so as to surround said each lens surface at a predetermined spacing from an outer periphery of the lens surface; melting the applied coating for causing the melted coating to spread onto the outer periphery of the lens surface; melting the applied coating; and solidifying the melted coating. Brown discloses applying a coating to the holder portion so as to surround said each lens surface; melting the applied coating for causing the melted coating to spread onto

the outer periphery of the lens surface; and solidifying the melted coating (col. 2, line 65-68, col. 3, lines 3-10, and col. 4, lines 16-19) but does not specifically disclose applying the coating to surround the lens surface at a predetermined spacing from an outer periphery of the lens surface. Fujimoto discloses, in figure 2, applying the coating to surround the lens surface at a predetermined spacing from an outer periphery of the lens surface (col. 7, lines 44-55 and col. 8, lines 7-12). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the device of Taniguchi et al. with the coating of Brown for the purpose of molding a lens array (col. 2, line 65-68, col. 3, lines 3-10, and col. 4, lines 16-19) and combining the device of Taniguchi et al. and Brown with the coating of Fujimoto for the purpose of a photoresist layer (col. 7, lines 44-55 and col. 8, lines 7-12).

Regarding claim 2, Taniguchi et al. discloses the claimed invention but does not specifically disclose wherein the plurality of lenses are integral with the holder portion. Brown discloses a method of making a lens array (4), wherein the plurality of lenses (8) are integral with the holder portion (9) (col. 4, lines 53-55). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to combine the device Taniguchi et al. with the lens and holder of Brown for the purpose of mounting the lenses.

Regarding claims 3 and 4, Taniguchi et al. and Brown disclose a method of making a lens array (4) but does not specifically disclose the coating comprising solid ink. It would have been obvious to use solid ink, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use (In re Leshin, 125 USPQ). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use solid ink for the purpose of its transparency.

Regarding claim 5, Taniguchi et al. discloses, in figures 1 and 11, a method of making a lens array (4), further comprising the step of forming a plurality of recesses (not labeled, the portion of the holder located below the lenses (8)) in the holder portion (9) for partitioning the plurality of lenses (8) (figure 1).

Regarding claim 6, Taniguchi et al. discloses, in figures 1 and 11, a method of making a lens array (4), further comprising the step of forming a light-shielding layer (11) on wall surfaces defining the plurality of recesses (not labeled, the portion of the holder located below the lenses (8)) (col. 4, lines 61-63).

Regarding claim 7, Taniguchi et al. discloses, in figures 1 and 11, a method of making a lens array (4), further comprising the step of dividing the resin-molded piece into a plurality of individual lens array (figure 11).

Regarding claim 8, Taniguchi et al. discloses the claimed invention but does not specifically disclose a method of performing light shielding treatment for a transparent member having a flat surface at least partially and a projection rising in the flat surface, the method comprising the steps of: applying a black material to the flat surface so as to surround the projection at a predetermined spacing from an outer periphery of the projection; melting the black material so that the melted black material spreads onto the outer periphery of the projection; and solidifying the melted black material. Brown discloses a method of performing light shielding treatment for a transparent member having a flat surface at least partially and a projection rising in the flat surface, the method comprising the steps of: applying a black material to the flat surface as to the holder portion so as to surround said each lens surface; melting the applied coating; and solidifying the melted coating (col. 2, line 65-68, col. 3, lines 3-10, and col.

4, lines 16-19) but does not specifically disclose applying the coating to surround the lens surface at a predetermined spacing from an outer periphery of the lens surface. Fujimoto discloses, in figure 2, applying the coating to surround the lens surface at a predetermined spacing from an outer periphery of the lens surface (col. 7, lines 44-55 and col. 8, lines 7-12). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the device of Taniguchi et al. and Brown with the coating of Fujimoto for the purpose of a photoresist layer (col. 7, lines 44-55 and col. 8, lines 7-12).

Regarding claim 9, Taniguchi et al. discloses the claimed invention but does not specifically disclose a method of performing light shielding treatment for a transparent member having a flat surface at least partially and a projection rising in the flat surface, wherein the applied black material constitutes a closed loop which surrounds the projection. Brown discloses a method of performing light shielding treatment for a transparent member having a flat surface at least partially and a projection rising in the flat surface, wherein the applied black material constitutes a closed loop which surrounds the projection (col. 3, lines 3-10). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to combine the device of Taniguchi et al. with the black material of Brown for the purpose of surrounding the lens (col. 3, lines 3-10).

Regarding claim 10, , Taniguchi et al. discloses the claimed invention but does not specifically disclose a method of performing light shielding treatment for a transparent member having a flat surface at least partially and a projection rising in the flat surface, wherein the applied black material constitutes a plurality of arc segments spaced from each other. Brown discloses a method of performing light shielding treatment for a transparent member having a flat

surface at least partially and a projection rising in the flat surface, wherein the applied black material constitutes a plurality of arc segments spaced from each other (col. 2, lines 65-68). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to combine the device of Taniguchi et al. with the black material of Brown for the purpose of surrounding the lens (col. 3, lines 3-10).

*Allowable Subject Matter*

4. Claim 11 is allowed.
5. The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claim(s), in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in claim(s) 11, wherein the claimed invention comprises a lens array including a first and a second light-shielding layer which are made of different materials and the second light-shielding layer being formed at the holder portion so as to surround the first light-shielding layer, as claimed.

*Response to Arguments*

6. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandi N. Thomas whose telephone number is 571-272-2341. The examiner can normally be reached on Monday - Thursday from 6-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brandi N Thomas  
Examiner  
Art Unit 2873

BT  
BNT

  
RICKY MACK  
SUPERVISORY PATENT EXAMINER